

REMARKS

In response to the Final Office Action mailed August 25, 2009, Applicants respectfully request reconsideration. Claims 1-4, 6, 8-13, 15-21, 25-28, 30, 32 and 35 were previously pending in this application. Claims 1-4, 6, 8-10, 12-13, 15, 20-21, 25-28, 30, 32 and 35 have been amended herein. As a result, claims 1-4, 6, 8-13, 15-21, 25-28, 30, 32 and 35 remain pending for examination, with claims 1, 12, 20, 25, 32 and 35 being independent. No new matter has been added.

Rejections Under 35 U.S.C. §103

The Office Action rejects claims 1-4, 8, 10, 12, 20, 25-26, 32 and 35 under 35 U.S.C. §103(a) as purportedly being obvious over Phillips et al (U.S. Patent No. 6,721,555) in view of Kurisko et al (U.S. Patent No. 7,174,130) and Bartek et al (U.S. Patent Publication No. 2004/0122649). Applicants respectfully traverse each of these rejections.

I. Overview of Some Embodiments

The present disclosure relates generally to installing and/or authenticating a wireless device on a network entity (e.g., a host computer) (page 1, lines 5-8). Device installation and/or authentication can be undertaken in the process of establishing a non-physical (i.e., wireless) communication connection between the wireless device and the network entity (page 2, lines 30-31). In contrast with conventional methods of transmitting installation and authentication information wirelessly between the wireless device and the network entity, which lack efficiency and security, some embodiments of the present disclosure provide systems and methods for transmitting installation and authentication information through physical connections to a physical interface (page 3, lines 8-13).

In some embodiments, a physical connection through a physical interface can be used to transfer information from the wireless device to the network entity to identify installation and/or

authentication protocols to be used in establishing a wireless connection with that particular wireless device. For example, a Bluetooth wireless device can identify a different set of protocols for installation/authentication than an Internet Protocol (IP) device (page 11, lines 15-30). The physical interface can also be used to transfer information to be used in the installation and/or authentication of the wireless device, such as information providing the location and/or identity of the particular device to be installed, security information (i.e., PIN numbers) to be used in authenticating the device, etc. (page 5, lines 2-5; page 11, lines 26-28)

In some embodiments, an invocation component incorporated into the wireless device can store the installation and/or authentication information (e.g., installation/authentication protocols) in a token key (page 20, lines 14-21). The token key can then be transferred through the physical interface connection to the network entity, where it can be propagated to the appropriate software that will use the connection information stored in the token key to establish the wireless connection with the wireless device (page 12, lines 7-12). While the wireless device and the network entity are physically connected by the physical interface, the invocation component can prompt the network entity to use the identified protocols to establish the wireless connection at that time. Alternatively, the connection information stored in the token key can be saved and used to establish the wireless connection later, after the physical connection has been disengaged (page 8, lines 10-19).

In other embodiments, the invocation component can be incorporated into the physical interface component itself, for example, in a physical interface such as a cradle or wand that has a computer memory for storing information (page 3, lines 14-17; page 8, lines 7-8; page 20, lines 19-21). In these implementations, the installation and/or authentication information can be received from the wireless device while the wireless device is physically connected to the physical interface, and stored in a token key within the memory of the physical interface itself (page 20, lines 1-3; lines 19-21). The physical interface itself can then transfer the token key to the network entity while the network entity is physically connected to the physical interface, and can prompt the network entity to establish the wireless connection with the wireless device (page 8, lines 20-30).

In embodiments in which the token key can be stored within the memory of the physical interface, the wireless device and the network entity need not be simultaneously physically connected to the physical interface in order to complete the transfer of the installation and/or authentication information. For example, the physical interface may first be physically connected to the wireless device, during which connection it may receive and store the connection information in a token key. The wireless device may then be disconnected from the physical interface before physically connecting the physical interface to the network entity and transferring the token key from the physical interface to the network entity (page 20, line 20 – page 21, line 1). Furthermore, the physical interface can be physically connected to multiple wireless devices, simultaneously or in series, and the physical interface can store connection data from all of the devices before being physically connected to the network entity in order to transfer the stored data and establish the multiple wireless connections (page 20, line 22 – page 21, line 5; page 27, lines 1-13).

The foregoing overview is provided solely for the convenience of the Examiner. It should be appreciated that each of the claims may not be limited in the manner described in the overview above. Therefore, the Examiner is requested not to rely upon the overview above for determining whether each of the claims distinguishes over the art of record, but to do so based solely upon the language of the claims themselves and the arguments presented below.

II. Overview of Phillips

Phillips describes a system for authenticating a terminal device over a wireless communications network (Phillips: col. 1, lines 12-15). The terminal device communicates with the network via a modem, to which it is connected by an R_m interface (Phillips: col. 1, lines 30-35). The R_m interface, when implemented as a physical interface, is described as being compatible with either the RS-232 protocol or the Universal Serial Bus protocol (Phillips: col. 7, lines 41-45). These protocols are known in the art as standards specifying the mechanical characteristics (connector shapes and configuration, etc.) of the interface, as well as the electrical signal characteristics that the interface should accommodate.

III. Overview of Kurisko

Kurisko describes a method to improve security during the Bluetooth pairing process (Kurisko: col. 1, lines 8-10). During pairing, the method requires a Bluetooth device to transmit link keys to another Bluetooth device over a temporary physical connection, i.e., over a wire (Kurisko: col. 6, lines 43-50).

IV. Overview of Bartek

Bartek describes a system that creates a wireless substitute for physical connections to computer peripheral devices (Bartek: paragraphs 0002, 0004). Instead of physically connecting a peripheral to a computer, for example through a cable, a master adapter is physically connected to the peripheral, and a slave adapter is physically connected to the computer (Bartek: paragraphs 0025, 0026). Although the master adapter and the slave adapter communicate with each other wirelessly, the peripheral device and the computer each experience only a physical connection to the adapters (Bartek: paragraphs 0029-0030). The master and slave adapters can be programmed with an encryption key so that they can recognize each other and communicate with each other wirelessly (Bartek: paragraph 0033).

V. Independent Claim 1

Independent claim 1 as amended recites, “the physical interface component: receives connection information associated with at least one of an installation protocol or an authentication protocol from the first device; stores the connection information in a memory of the physical interface component; and provides the connection information to the second device to establish a non-physical connection between the first device and the second device.” Neither Phillips, Kurisko nor Bartek meets these limitations.

At page 3, the Office Action relies upon the R_m interface described by Phillips as purportedly meeting the limitations of the “physical interface component” recited in Applicants’ claim 1. The Office Action appears to rely upon the RS-232/USB protocol with which the R_m

interface is compatible as purportedly meeting the limitations of “an installation protocol or an authentication protocol” recited in Applicants’ claim 1. However, as discussed above, the RS-232 and USB standards are not associated with installation or authentication protocols for a device. Rather, they are known in the art as specifications of mechanical configurations and signal capabilities of connectors. Thus, no installation or authentication protocols are described by Phillips in reference to the R_m interface. Furthermore, Phillips’s R_m interface is merely a standard wired connection between a terminal device and a modem, which is not used in any way to establish a non-physical connection between these devices. Phillips makes no mention of the R_m interface receiving or storing any connection information from a first device in any memory of the interface, let alone providing connection information to a second device to establish a non-physical connection.

Kurisko also fails to meet the above limitations recited in claim 1. As discussed above, Kurisko describes a Bluetooth device transmitting link keys directly to another Bluetooth device over a wired connection. Kurisko’s physical interface itself (i.e., the wire) does not receive or store any connection information from the first Bluetooth device in any memory of the interface. Neither does Kurisko’s interface itself provide any connection information to the second device.

Bartek does not cure these deficiencies of Phillips and Kurisko. Although the Office Action at page 3 appears to rely upon either Bartek’s master adapter or Bartek’s slave adapter as a physical interface component storing connection information associated with a protocol, neither of these devices meets the above limitations recited in claim 1. As discussed above, the only information described as residing on Bartek’s adapters is an encryption key allowing the master and slave adapters to connect with each other. This encryption key is not associated with an installation or authentication protocol from a first device, and neither of the adapters receives the encryption key from a first device nor stores it in a memory of the adapter. Rather, the encryption key must be pre-programmed into each adapter before the system can be put into operation, so that the adapters will be able to recognize each other. Furthermore, Bartek’s adapters do not provide any connection information to a second device; the encryption key, for example, is only of use to the adapters

themselves for their own communications with each other, and is nowhere mentioned as being provided to any second device.

Even if Phillips, Kurisko and Bartek were combined, the alleged combination would fail to meet all limitations of claim 1. For at least these reasons, claim 1 patentably distinguishes over any combination of Phillips, Kurisko and Bartek, and it is respectfully requested that the rejection of claim 1 be withdrawn.

Claims 2-4, 8 and 10 depend from claim 1 and are allowable for at least the same reasons. Accordingly, it is respectfully requested that the rejections of these claims be withdrawn.

VI. Independent Claim 12

Independent claim 12 as amended recites, “the physical interface component: receives connection information associated with at least one of an installation protocol or an authentication protocol from the device; stores the connection information in a memory of the physical interface component; and prompts the network entity to perform at least one of a device installation or a device authentication to establish a non-physical connection with the device using the connection information.” Neither Phillips, Kurisko nor Bartek meets these limitations.

As can be appreciated from the foregoing discussion of Phillips, Kurisko and Bartek, each of these references fails to meet limitations recited in claim 12 related to a physical interface component receiving connection information associated with protocols from a device and storing them in a memory of the interface. In addition, none of the cited references disclose or suggest a physical interface prompting a network entity to perform device installation or authentication or to establish a non-physical connection using any connection information. Neither the R_m interface of Phillips, the wire connector of Kurisko nor either of the adapters of Bartek is described as having any prompting capability of its own. Rather, these connectors simply function to allow signals to pass through from one end of the connector to the other. Any prompting to establish a connection between two other devices, if any, must be performed by the other devices, not by the physical interface component.

Even if Phillips, Kurisko and Bartek were combined, the alleged combination would fail to meet all limitations of claim 12. For at least these reasons, claim 12 patentably distinguishes over any combination of Phillips, Kurisko and Bartek, and it is respectfully requested that the rejection of claim 12 be withdrawn.

VII. Independent Claim 20

Independent claim 20 as amended recites, “an invocation component operatively connected to a wireless device, wherein the invocation component is configured to: generate data identifying at least one of an installation protocol or an authentication protocol for establishing a wireless connection between the wireless device and a network entity”. Neither Phillips, Kurisko nor Bartek meets these limitations.

As discussed above, Phillips describes a system in which a terminal device (i.e., a laptop) is connected through an R_m interface to a modem. Phillips neither describes a wireless device nor contemplates any objective of establishing a wireless connection between a wireless device and a network entity. As such, Phillips makes no mention of an invocation component to “generate data identifying at least one of an installation protocol or an authentication protocol for establishing a wireless connection”, as required by claim 20.

Kurisko describes a pairing operation between two Bluetooth devices. As it is known in Kurisko that the devices to be paired both operate in compliance with the Bluetooth protocols, there is no need for either device to identify to the other device the protocols that should be used in establishing a connection. Thus, Kurisko also fails to disclose or suggest an invocation component to “generate data identifying at least one of an installation protocol or an authentication protocol for establishing a wireless connection”, as required by claim 20. Likewise, Bartek describes devices coupled to master and slave adapters, which are pre-programmed to recognize and communicate with each other. No mention is made of identifying protocols, let alone generating data to do so.

Even if Phillips, Kurisko and Bartek were combined, the alleged combination would fail to meet all limitations of claim 20. For at least these reasons, claim 20 patentably distinguishes over

any combination of Phillips, Kurisko and Bartek, and it is respectfully requested that the rejection of claim 20 be withdrawn.

VIII. Independent Claim 25

Independent claim 25 as amended recites, “while a physical interface component is physically connected to a wireless device, storing connection information associated with at least one of an installation protocol or an authentication protocol from the wireless device within a memory of the physical interface component; and while the physical interface component is physically disconnected from the wireless device and physically connected to a network entity, providing the connection information to the network entity from the memory of the physical interface component to establish a wireless connection between the wireless device and the network entity”. Neither Phillips, Kurisko nor Bartek meets these limitations.

As should be clear from the foregoing discussion of Phillips, Kurisko and Bartek, none of these references meet limitations recited in claim 25 relating to storing connection information associated with protocols from a wireless device within a memory of the physical interface and providing the connection information from the memory of the physical interface to a network entity. It follows that each of the cited references also fails to disclose or suggest providing connection information “while the physical interface component is physically disconnected from the wireless device and physically connected to a network entity”, as required by claim 25. Since any physical interfaces described by the cited references do not store connection information within the interfaces, they cannot disconnect from a source of connection information and still provide it to a network entity.

Even if Phillips, Kurisko and Bartek were combined, the alleged combination would fail to meet all limitations of claim 25. For at least these reasons, claim 25 patentably distinguishes over any combination of Phillips, Kurisko and Bartek, and it is respectfully requested that the rejection of claim 25 be withdrawn.

Claim 26 depends from claim 25 and is allowable for at least the same reasons. Accordingly, it is respectfully requested that the rejection of claim 26 be withdrawn.

IX. Independent Claim 32

Independent claim 32 as amended recites, “storing the first and second connection information in a memory of the physical interface component; and providing the first and second connection information to a network entity while the physical interface component is physically connected to the network entity to establish non-physical connections between the first and second wireless devices and the network entity”. Neither Phillips, Kurisko nor Bartek meets these limitations.

As made clear in the foregoing discussion of Phillips, Kurisko and Bartek, these references fail to meet limitations recited in claim 32 relating to storing connection information for a first wireless device in a memory of the physical interface and providing the connection information to a network entity to establish a non-physical connection. It is therefore doubly clear that the cited references fail to describe performing the same actions for a second wireless device in addition to the first.

Even if Phillips, Kurisko and Bartek were combined, the alleged combination would fail to meet all limitations of claim 32. For at least these reasons, claim 32 patentably distinguishes over any combination of Phillips, Kurisko and Bartek, and it is respectfully requested that the rejection of claim 32 be withdrawn.

X. Independent Claim 35

Independent claim 35 as amended recites, “means for storing, in a memory of the physical interface, data identifying at least one of an installation protocol or an authentication protocol for establishing a wireless connection between the at least two devices; means for providing the data from the memory of the physical interface to at least one network entity; and means for prompting

the at least one network entity to establish the wireless connection using the at least one of the installation protocol or the authentication protocol.”

For reasons that should be clear from the foregoing discussion of Phillips, Kurisko and Bartek, these references, whether alone or in combination, fail to disclose or suggest the above limitations of claim 35. Therefore, claim 35 patentably distinguishes over Phillips, Kurisko and Bartek, and it is respectfully requested that the rejection of claim 35 be withdrawn.

XI. Rejections of Dependent Claims

The Office Action rejects claims 6, 9, 15-19, 21, 27 and 30 under 35 U.S.C. §103(a) as purportedly being obvious over Phillips in view of Kurisko, Bartek and Plasson et al (U.S. Patent No. 6,795,688). Applicants respectfully traverse each of these rejections. Each of claims 6, 9, 15-19, 21, 27 and 30 depends from an independent claim. As discussed above, each of the independent claims patentably distinguishes over any combination of Phillips, Kurisko and Bartek. Plasson is cited as teaching a daisy chain scheme, a touch-pad, a plurality of devices, independent connections, and a wireless personal area network. Plasson is not cited as curing the deficiencies of Phillips, Kurisko and Bartek. Accordingly, even if Phillips, Kurisko, Bartek and Plasson were combined, the alleged combination would fail to meet all limitations of any of claims 6, 9, 15-19, 21, 27 and 30. Therefore, claims 6, 9, 15-19, 21, 27 and 30 patentably distinguish over Phillips, Kurisko, Bartek and Plasson, the rejections of these claims should be withdrawn.

The Office Action rejects claim 11 under 35 U.S.C. §103(a) as purportedly being obvious over Phillips in view of Kurisko, Bartek and Hocker et al. (U.S. Patent No. 5,923,757). Applicants respectfully traverse this rejection. Claim 11 depends from independent claim 1, which, as discussed above, patentably distinguishes over any combination of Phillips, Kurisko and Bartek. Hocker is cited as teaching a non-physical connection being at least one of a wireless connection, an optical connection, and an infrared connection, and does not cure the deficiencies of Phillips, Kurisko and Bartek. Accordingly, even if Phillips, Kurisko, Bartek and Hocker were combined, the alleged combination would fail to meet all limitations of claim 11. Therefore, claim 11 patentably

distinguishes over Phillips, Kurisko, Bartek and Hocker, and the rejection of claim 11 should be withdrawn.

The Office Action rejects claims 13 and 28 under 35 U.S.C. §103(a) as purportedly being obvious over Phillips in view of Kurisko, Bartek and Chaskar et al (U.S. Patent Publication No. 2005/0066044). Applicants respectfully traverse each of these rejections. Each of claims 13 and 28 depends from an independent claim. As discussed above, each of the independent claims patentably distinguishes over any combination of Phillips, Kurisko and Bartek. Chaskar is cited as teaching an artificial intelligence technique, and does not cure the deficiencies of Phillips, Kurisko and Bartek. Accordingly, even if Phillips, Kurisko, Bartek and Chaskar were combined, the alleged combination would fail to meet all limitations of either of claims 13 and 28. Therefore, claims 13 and 28 patentably distinguish over Phillips, Kurisko, Bartek and Chaskar, and the rejections of these claims should be withdrawn.

General Comments on Dependent Claims

Because each of the dependent claims depends from a base claim that is believed to be in condition for allowance, Applicants believe that it is unnecessary at this time to argue the further distinguishing features of all of the dependent claims. However, Applicants do not necessarily concur with the interpretation of the dependent claims as set forth in the Office Action, nor do Applicants concur that the basis for the rejection of any of the dependent claims is proper. Therefore, Applicants reserve the right to specifically address in the future the further patentability of the dependent claims not specifically addressed herein.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, the Director is hereby authorized to charge any deficiency or credit any overpayment in the fees filed, asserted to be filed, or which should have been filed herewith to our Deposit Account No. 23/2825 under Docket No. M1103.70658US00 from which the undersigned is authorized to draw.

Dated: November 25, 2009

Respectfully submitted,

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